

NEW HOST RECORDS FOR *ACANTHOSCELIDES*
(COLEOPTERA: BRUCHIDAE)

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Many new records for species of the seed beetle genus *Acanthoscelides* have recently been published in revisions (Johnson, 1970), new species descriptions and ecological papers (Johnson and Kingsolver, 1971; Johnson 1974a, b; 1977a, b, c; Bottimer, 1969a, 1969b). Additional records for the genus have become available and need to be published so that they may be used in review ecological and taxonomic papers currently in preparation. I have listed these new, unpublished records below. The last two records are from the Tiliaceae but the rest are from the Leguminosae. Those species of *Acanthoscelides* listed by number were examined and found to be sufficiently different from named forms or too variable to be given a name. Revisionary studies currently under way will provide names for these entities in the near future.

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In the text of this paper, C. D. Johnson is abbreviated CDJ and L. J. Bottimer LJB.

Acanthoscelides aureolus (Horn)

1. *Astragalus bisulcatus* (Hook.) Gray: Colorado. Weld Co.: Pawnee Grassland Pasture, Nunn, 6 August 1971 (J. Chu).
2. *A. bisulcatus* var. *bisulcatus*: Utah. Uintah Co.: ca 4900', 3 mi N Jensen, 14 July 1977 (CDJ #52-77).
3. *A. drummondii* Douglas: Colorado. Weld Co.: Pawnee Grassland Pasture, Nunn, 2 & 30 July & 6 August 1971 (J. Chu).

4. *A. grayii* Parry ex Wats.: Wyoming. Fremont Co.: Moneta, 23 July 1976 (collector unknown).

5. *A. humistratus* A. Gray: Colorado. Weld Co.: Pawnee Grassland Pasture, Nunn, 15 & 17 July 1976 (R. Lavigne).

6. *A. pattersoni* Gray: Colorado. Mesa Co.: Fruita, 28 December 1937 (LJB #76v).

7. *A. praelongus* var. *lonchopus* Barneby: Arizona. Navajo Co.: ca 5500', 9 mi NE Kayenta, 16 July 1977 (CDJ #62-77).

8. *A. racemosus* (Pursh): South Dakota. Stanley Co.: 10 mi S Pierre, 28 December 1937 (H. M. Trelease, collector; LJB #76u).

9. *Oxytropis sericea* Nutt.: Colorado. Weld Co.: Pawnee Grassland Pasture, Nunn, 2 & 6 August 1971 (J. Chu & R. L. Lavigne).

A. biustulus (Fall)

1. *Desmodium cinerascens* Gray: Arizona. Pima Co.: 5000', Madera Canyon, Santa Rita Mts., 9 September 1925 (LJB #54 n 8). Cochise Co.: 1 mi NW Bisbee, 7 October 1977 (CDJ #121-77).

2. *D. neomexicanum* Gray: Arizona. Pima Co.: Madera Canyon, Santa Rita Mts., 9 September 1925 (LJB #54 n 9).

A. chiricahuae (Fall)

1. *Mimosa brandegei* Robinson: Mexico. Baja California Sur: ca 1600', 9 mi S El Triunfo, 26 December 1975 (CDJ #124-75).

2. *M. laxiflora* Benth.: Mexico. Sonora: ca 3 mi W San Carlos Bay, 22 December 1972 (CDJ #139-72).

3. *M. palmeri* Rose: Mexico. Sonora: 14 mi W Alamos, 24 February 1973 (CDJ #166-73).

4. *M. monancistra* Benth.: Mexico. Jalisco: Chapala, 17 August 1949 (LJB #125s).

A. clitellarius (Fähraeus)

1. *Acacia* aff. *riparia*? HBK: Mexico. Jalisco: 56 mi S Puerto Vallarta, 9 March 1973 (CDJ #448-73).

2. *Piptadenia flava*? (Spreng.) Benth.: Mexico. Jalisco: 34 mi NW Barra de Navidad, 9 March 1973 (CDJ #439-73).

A. collusus (Fall)

1. *Amorpha canescens* (Nutt.) Pursh: Nebraska National Forest, Halsey, Nebraska, 14 November 1931 (LJB #63v).

A. difficilis (Sharp)

1. *Mimosa albida* Humb. & Bonpl.: Costa Rica. Guanacaste: Santa Rosa N.P., 15 February 1976 (D. H. Janzen).

A. distinguendus (Horn)

1. *Rhynchosia difformis* (Ell.) DC: Florida. Alachua Co.: Gainesville, 21 August 1960 (LJB #108i).
2. *R. galactioides* Endl. ex Walp.: Florida. Santa Rosa Co.: 4 mi SW Milton, 4 August 1954 (LJB #108k).

A. floridae (Horn)

1. *Amorpha fruticosa* Linnaeus: Florida. Pinellas Co.: Dunedin, 1 February 1930 (LJB #58o); Alachua Co.: Gainesville, 17 October 1938 (LJB #81o). Washington, D.C.: Agricultural Grounds, 8 September 1927, 13 March 1931, 29 May 1928, Fall 1929 (LJB ##54u4, 61z, 54x9, 59d). Maryland. Prince Georges Co.: College Park, 4 November 1942 (LJB #82f). Michigan: LaSalle, 10 September 1934 (LJB #69w). South Dakota. Union Co.: Vermillion, 29 December 1942 (LJB #82a). Oklahoma. Payne Co.: Stillwater, 5 January 1943 (H.I. Featherly, collector; LJB #82c). Texas: Lake Charlotte, 24 September 1923 (LJB #52c5).

A. fraterculus (Horn)

1. *Astragalus caryocarpus* Ker-Gawl.: Canada. Manitoba: Aweme, 23 May 1930 (R. M. White; LJB #878).
2. *A. crassicaarpus* Nutt. var. *paysonii*: Colorado. Weld Co.: Pawnee Grassland Pasture, Nunn, 15 July 1977 (R. Lavigne).
3. *A. hyalinus* M. E. Jones: Wyoming. Albany Co.: Jelm, 29 August 1976 (R. Lavigne).
4. *A. missouriensis* Nutt.: Colorado. Weld Co.: Pawnee Grassland Pasture, Nunn, 1 June 1972 (R. Lavigne).
5. *A. pattersoni* Gray: Colorado. Mesa Co.: Fruita, 28 December 1937 (S. F. Trelease; LJB #76v).
6. *A. pectinatus* Dougl. ex Hook.: Colorado. Weld Co.: Pawnee Grassland Pasture, Nunn, 29 July, 5 & 6 August 1971 (J. Chu).

A. kingsolveri Johnson

1. *Indigofera lindheimeriana* Scheele: Texas. Uvalde Co.: Concan, 6 July 1947 (LJB #88i).

A. lobatus (Fall)

1. *Astragalus humistratus* Gray: Arizona. Coconino Co.: base, south slope Mt. Elden, Flagstaff, 16 September 1972 (CDJ #64-72).

2. *A. mollisimus* Torr. var. *bigelovii* (Gray) Barneby: Arizona. Cochise Co.: ca 4000', Bisbee-Douglas Int. Airport, ca 8 mi N Douglas, 11 June 1977 (CDJ #35-77).

3. *A. mollisimus* var. *marcidus* (Rydb.) Barneby: Texas. Brewster Co.: Marathon, 19 June 1957 (LJB #100l); Big Bend National Park: Basin, 20 June 1957 (LBJ #100t); Green Gulch, 20 June 1957 and 14 May 1959 (LBJ #100u & 104a).

A. longistilus (Horn)

1. *Lespedeza capitata* Michx.: New Jersey. Ocean Co.: Lakehurst, 17 June 1934 (LJB #69i); Camden Co.: Haddon Heights, July 1935, 19 July 1932, 8 July 1931 (LJB ##67z, 63s, 62s); Ocean Co.: Forked River, 17 June 1934 (LJB #69o); Atlantic Co.: Mays Landing, July 1933 (LJB #79o); Marmora, 4 July 1938 (LJB #78c). New York. Suffolk Co.: Westbury, Long Island, 22 July 1937 (LJB #76c).

2. *L. texana* Britt. ex Small: Texas. Kerr Co.: Kerrville, 7 July 1950 and 4 October 1955 (LJB ##91y & 96q).

3. *L. virginica* (L.) Britt.: Texas. Bastrop Co.: Bastrop State Park, 15 April 1959 (LJB #103k).

A. macrophthalmus (Schaeffer)

1. *Leucaena esculenta* Benth.: Mexico. Jalisco: ca 5100', 5 mi S Za-coalco, 6 March 1973 (CDJ #348-73); Chapala, 16 August 1949 (LJB #125p).

2. *L. lanceolata* Wats.: Mexico. Sinaloa: 3 mi SE Escuinapa, 10 March 1973 (CDJ #485-73); Sonora: 2 mi E Alamos, 29 December 1977 (CDJ #188-77).

3. *L. macrophylla* Benth.: Mexico. Jalisco: ca 4000', 8 mi N Tonila, 6 March 1973 (CDJ #361-73).

4. *L. pulverulenta* (Schl.) Benth.: Texas. Hidalgo Co.: McAllen, July 1923 (LJB #52a). Cameron Co.: Brownsville, 29 October 1927 & 21 September 1947 (LJB ##54w & 89e). Nueces Co.: Corpus Christi, 8 September 1963 (LJB #116t).

5. *L. retusa* Benth. ex Gray: Texas. Kimble Co.: Junction, 26 August 1924 & 14 September 1946 (LJB ##52x6 & 87e); Sutton Co.: Sonora, 8 August 1961 (LJB #112j); Schleicher Co.: El Dorado, 6 August 1947 (H. R. Reed, collector; LJB #90f).

6. *L. salvadorensis* Standley: San Andres, El Salvador, 6 June 1958 (LJB #102d).

A. mexicanus (Sharp)

1. *Mimosa* nr. *albida* Humb. & Bonpl.: Mexico. Jalisco: 34 & 52 mi NW Barra de Navidad, 9 March 1973 (CDJ ##437-73 & 443-73); 56 mi S Puerto Vallarta, 9 March 1973 (CDJ #451-73).
2. *M. brandegei* Robinson: Mexico. Baja California Sur: ca 1600', 9 mi S El Triunfo, 26 December 1975 (CDJ #124-75).
3. *M. laxiflora* Benthams: Mexico. Sonora: 13 mi E Navojoa, 25 December 1972 (CDJ #167-72).
4. *M. monancistra* Benthams: Mexico. Jalisco: Chapala, 17 August 1949 (LJB #125s).
5. *M. palmeri* Rose: Mexico. Sonora: Lake Mocuzari, 24 December 1972 (CDJ #150-72); 14 mi W Alamos, 24 February 1973 (CDJ #166-73).
6. *M. pudica* Linnaeus: Panama. Canal Zone: Summitt Gardens, Summitt, 27 January 1964 (LJB #119r).
7. *M. setigera* Brit. & Rose: Mexico. Jalisco: 15 mi W Magdalena, 30 December 1972 (CDJ #202-72).

A. mixtus (Horn)

1. *Astragalus praelongus* var. *lonchopus* Barneby: Arizona. Navajo Co.: ca 5500', 9 mi NE Kayenta, 16 July 1977 (CDJ #62-77).
2. *A. thurberi* Gray: Arizona. Cochise Co.: ca 4000', 4 mi W Douglas, 11 June 1977 (CDJ #33-77); ca 4000', Bisbee-Douglas Int. Airport, ca 8 mi N Douglas, 11 June 1977 (CDJ #34-77).

A. modestus (Sharp)

1. *Aeschynomene rudis* Benthams: Mexico. Jalisco: lakeside, 3 mi W Chapala, 4 January 1973 (CDJ #55-73).

A. obrienorum Johnson

1. *Cassia villosa* Mill.: Mexico. Baja California Sur: ca 1600', 9 mi S El Triunfo, 26 December 1975 (CDJ #122-75).
2. *Cassia armata* Wats.: California. San Bernardino Co.: 2100', 21 mi W Needles, 8 August 1978 (CDJ #249-78).

A. obsoletus (Say)

1. *Tephrosia ambigua* D. Dietr.: Florida. Orange Co.: Orlando, 25 June 1928 (LJB #55a9).
2. *T. spicata* (Walt.) Torr. & Gray: Florida. Polk Co.: Polk City, 13 June 1929 (LJB #55c6).
3. *T. virginica* Bigel.: Virginia: Barcroft, 6 September 1927 (LBJ #54u1).

A. obvelatus

1. *Phaseolus glabellus* Piper: Mexico. Hidalgo: Tlauchinal, summer 1978 (A. Delgado).

A. oregonensis Johnson

1. *Petalostemum ornatus* Dougl. ex Hook.: Washington: Kennewick, 10 October 1937 (collector unknown).

A. perforatus (Horn)

1. *Astragalus canadensis* Linnaeus: Washington, D.C. 8 March 1931 (LJB #61x).

A. pertinax (Sharp)

1. *Aeschynomene* sp.: Costa Rica. Guanacaste: Santa Rosa N.P., 31 December 1975 (D. H. Janzen).

A. pullus (Fall)

1. *Astragalus thurberi* Gray: Arizona. Cochise Co.: ca 4000', Bisbee-Douglas Int. Airport, ca 8 mi N Douglas, 11 June 1977 (CDJ #34-77).
2. *A. trichopodus* A. Gray var. *lonchus* (M. E. Jones) Barneby: Mexico. Baja California: ca 2 mi S San Quintin, 20 December 1975 (CDJ #85-75).

A. quadridentatus (Schaeffer)

1. *Mimosa berlandieri* A. Gray ex Torr.: Texas. Hidalgo Co.: 4 mi S Pharr, 24 October 1947 (LJB #90c).
2. *M. galeottii* Bentham: Mexico: Morelos. 7500', 18 February 1925 (LJB #53n6).

A. rufovittatus (Schaeffer)

1. *Tephrosia cana* Brandeg.: Mexico. Baja California Sur: 4 mi E Cabo San Lucas, 27 December 1975 (CDJ #134-75).
2. *T. cinerea* Pers.: Mexico. Jalisco: 10 mi S Puerto Vallarta, 9 March 1973 (CDJ #461-73).
3. *T. thurberi* (Rydb.) C. E. Wood: Arizona. Pima Co.: Bog Springs Camp, Madera Canyon, 14 October 1976 (CDJ #47-76). Cochise Co.: Ramsey Canyon, 28 September 1956 (LJB #98r).

A. schrankiae (Horn)

1. *Mimosa* nr. *albida* Humb. & Bonpl.: Mexico. Jalisco: 34 mi NW Barra de Navidad, 9 March 1973 (CDJ #437-73).

2. *M. quadrivalis* Linnaeus: Mexico. Jalisco: ca 1200', 18 mi N Barra de Navidad, 2 January 1973 (CDJ #13-73).

3. *M. setigera* Brit. & Rose: Mexico. Jalisco: 15 mi W Magdalena, 30 December 1972 (CDJ #202-72).

4. *Schrankia microphylla* (Dryand.) Standl.: Texas. Liberty Co.: Liberty, 11 & 15 September 1923 (LJB #52b6); Cass Co.: Maud, 2 August 1955 (LJB #95l). Florida. Polk Co.: Lake Alfred, 24 June 1928 (LJB #54z7).

5. *S. roemeriana* (Scheele) Blankenship: Texas: Bexar Co., 19 June 1962 (LBJ #113c); Kerr Co.: Kerrville, Fall 1947 (LBJ); Menard Co.: Menard, 16 June 1946 (LJB #85z).

A. seminulum (Horn)

1. *Dalea aurea* Pursh: Texas. Johnson Co.: Cleburne State Park, 27 July 1959 (LJB #105a).

2. *D. enneandra* Nutt.: Texas. Johnson Co.: 9 mi S Cleburne, 2 August 1959 (LJB #105d). Menard Co.: Menard, 6 July 1946 (LJB #87h).

3. *D. frutescens* Gray: Texas. Kerr Co.: Kerrville, 6 October 1958 (LJB #104u).

4. *Petalostemum feayi*; Chapm.: Florida. Polk Co.: Lake Alfred, 22 & 27 August 1929 (LJB #56w); Lake Alfred, 7 September 1929 (LJB #56s).

5. *P. stanfieldii* Small: Texas. Menard Co.: Menard, 20 June 1946 (LJB #86m).

A. submuticus (Sharp)

1. *Amorpha fruticosa* var. *angustifolia* Pursh: Texas. Dallas Co.: Dallas, 14 & 20 October 1927 (LJB #54v); NE of Dallas, 19 October 1927 (LJB #54v4).

Acanthoscelides tridenticulatus Bottimer

1. *Mimosa somnians* Humb. & Bonpl.: Mexico. Nayarit: ca 4000', 27 mi SE Tepic, 2 March 1973 (CDJ #312-73).

A. zeteki Kingsolver

1. *Cajanus bicolor* DC: Panama. Canal Zone: Frijoles, 2 January 1964 (LJB #118o).

2. *Rhynchosia calycosa* Hemsl.: Panama. Canal Zone: Barro Colorado Island, end of Barbour Trail, 24 February 1964 (LJB #121o).

Acanthoscelides sp. #1

1. *Aeschynomene americana* Linnaeus: Mexico. Nayarit: ca 3500', 24 mi NW Ixtlan Del Rio, 5 January 1973 (CDJ #77-73).

Acanthoscelides sp. #2

1. *Desmodium tortuosum* (Sw.) DC: Mexico. Jalisco: hillside, 4 mi W Chapala, 4 January 1973 (CDJ #50-73); ca 4000', 27 mi W Magdalena, 5 January 1973 (CDJ #72-73).

Acanthoscelides sp. #3

1. *Desmodium tortuosum* (Sw.) DC: Mexico. Jalisco: hillside, 4 mi W Chapala, 4 January 1973 (CDJ #50-73). Sonora: Lake Mocuzari, 22 December 1976 & 29 December 1977 (CDJ ##130-76 & 192-77); ca 0.5 mi E Alamos, 28 December 1977 (CDJ #187-77).

Acanthoscelides sp. #4

1. *Aeschynomene* sp.: Costa Rica. Guanacaste. Santa Rosa N.P., 31 December 1975 (D. H. Janzen).

Acanthoscelides sp. #5

1. *Acacia cornigera* (Linnaeus) Willd.: Mexico. Veracruz: 10 mi E Aca-yucan, 15 June 1968 (CDJ #116-68).

Acanthoscelides sp. #6

1. *Calopogonium mucunoides* Desv.: Mexico. Jalisco: ca 1200', 18 mi N Barra de Navidad, 2 January 1973 (CDJ #14-73). Nayarit: 43 mi SW Compostela, 28 February 1973 (CDJ #270-73); 3 mi SE Sayulita, 1 March 1973 (CDJ #279-73).

Acanthoscelides sp. #7

1. *Dalea* aff. *submontana* Rose: Mexico. Jalisco: hillside, 4 mi W Chapala, 4 January 1973 (CDJ #51-73); lakeside, 3 mi W Chapala, 4 January 1973 (CDJ #54-73); ca 4200', 4 mi SE Tequila, 5 January 1973 (CDJ #60-73). Nayarit: ca 3500', 24 mi NW Ixtlan Del Rio, 5 January 1973 (CDJ #79-73).

Acanthoscelides sp. #8

1. *Desmodium adscendens* DC: Panama. Canal Zone: Frijoles, 26 December 1963 (LJB #119f).

2. *D. intortum* Urb.: Panama. Chiriqui: Volcan de Chiriqui, 7 January 1964 (LJB #123g).

Acanthoscelides sp. #9

1. *Eysenhardtia texana* Scheele: Texas. Val Verde Co.: Comstock, July 1957 (LJB #100e).

Acanthoscelides sp. #10

1. *Leucaena lanceolata* Wats.: Mexico. Sinaloa: 4 mi N Mazatlan, 29 December 1972 (CDJ #195-72); 33 mi N Mazatlan, 7 January 1973 (CDJ #126-73); near beach, 6 mi N Mazatlan, 26 February 1973 (CDJ #217-73); 3 mi SE Escuinapa, 10 March 1973 (CDJ #485-73). Nayarit: 2 mi E San Blas, 6 January 1973 (CDJ #98-73); 8 mi S Acaponeta, 27 February 1973 (CDJ #237-73); 14 mi SE Sayulita, 1 March 1973 (CDJ #296-73); 8 mi S Acaponeta, 10 March 1973 (CDJ #480-73).

2. *L. macrophylla* Benth: Mexico. Jalisco: ca 4000', 8 mi N Tonila, 6 March 1973 (CDJ #361-73).

Acanthoscelides sp. #11

1. *Leucaena lanceolata* Wats.: Mexico. Sinaloa: 4 mi N Mazatlan, 29 December 1972 (CDJ #195-72); near beach, 6 mi N Mazatlan, 26 February 1973 (CDJ #217-73). Nayarit: 43 mi SW Compostela, 28 February 1973 (CDJ #274-73). Jalisco: ca 1200', 18 mi N Barra de Navidad, 2 January 1973 (CDJ ##19-73 & 21-73).

Acanthoscelides sp. #12

1. *Leucaena esculenta* Benth: Mexico. Veracruz: 10 mi E Acayucan, 15 June 1968 (CDJ #115-68).

Acanthoscelides sp. #13

1. *Lysiloma divaricata* (Jacq.) Macbride: Mexico. Oaxaca: 3500', 51 mi SE Oaxaca, 6 July 1968 (CDJ #229-68).

Acanthoscelides sp. #14

1. *Mimosa albida* Humb. & Bonpl.: Mexico. Nayarit: ca 4000', 27 mi SE Tepic, 2 March 1973 (CDJ #313-73).

Acanthoscelides sp. #15

1. *Mimosa albida* Humb. & Bonpl.: Mexico. Veracruz: 4200', 5 mi NE Huatusco, 12 June 1968 (CDJ #77-68).

Acanthoscelides sp. #16

1. *Mimosa albida* Humb. & Bonpl.: Mexico. Veracruz: 4200', 5 mi NE Huatusco, 12 June 1968 (CDJ #77-68).

Acanthoscelides sp. #17

1. *Mimosa pigra* Linnaeus: Mexico. Nayarit: 3 mi S Rosa Morada, 26 August 1965 (CDJ); 12 mi N Rosa Morada, 12 July 1968 (CDJ #278-68).

2. *M. dormiens* Humb. & Bonpl. ex Willd.: Mexico. Sinaloa: 8 mi SE Mazatlan, 23 August 1965 (CDJ).

Acanthoscelides sp. #18

1. *Triumfetta lappula* Linnaeus: Mexico. Nayarit: ca 2800', 6 mi NW Tepic, 5 January 1973 (CDJ #92-73). (Tiliaceae)

Acanthoscelides sp. #19

1. *Heliocarpus attenuatus* S. Wats.: Mexico. Sonora: 28 December 1977 (CDJ #181-77). (Tiliaceae)

Acanthoscelides sp. #20

1. *Dalea cliffortiana* Willd.: Mexico. Nayarit: ca 3500', 24 mi NW Ixtlan Del Rio, 5 January 1973 (CDJ #75-73).

2. *D. leporina* (Ait.) Bullock: Mexico. Jalisco: lakeside, 3 mi W Chapala, 4 January 1973 (CDJ #56-73).

3. *D. scandens* (Mill.) R. T. Clausen var. *occidentalis* (Rydb). Barneby: Mexico. Jalisco: ca 1400', 20 mi N Barra de Navidad, 8 March 1973 (CDJ #432-73).

4. *D. tomentosa* (Cav.) Willd. var. *tomentosa*: Mexico. Nayarit: ca 4000', 27 mi SE Tepic, 2 March 1973 (CDJ #310-73).

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